

isc Silicon PNP Power Transistor
2SB683
DESCRIPTION

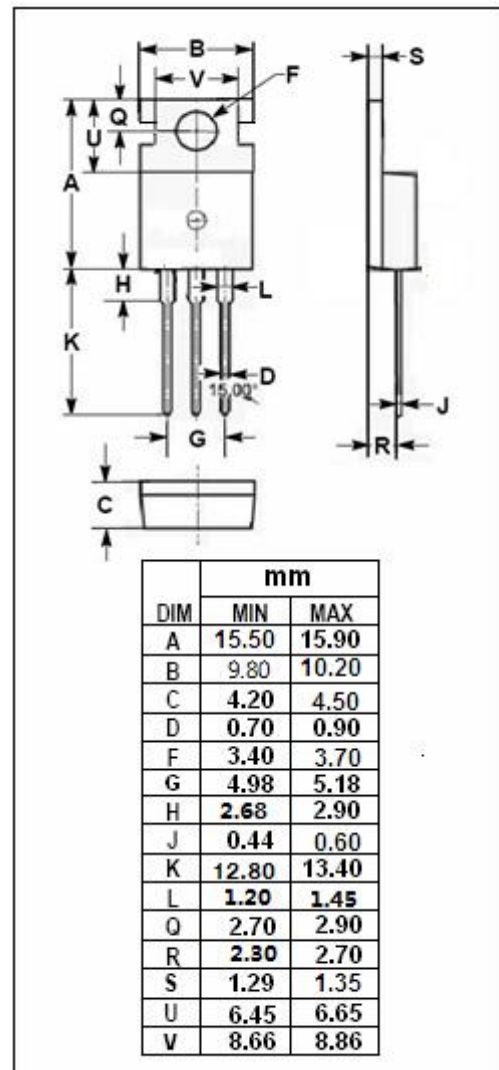
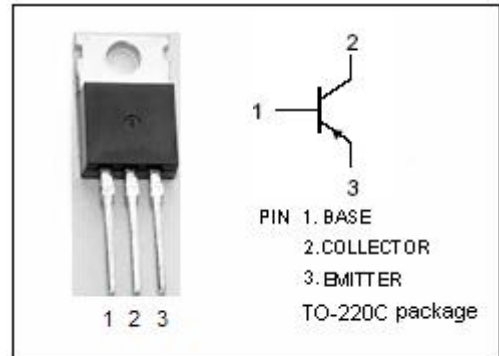
- Collector-Emitter Breakdown Voltage-
: $V_{(BR)CEO} = -100V(\text{Min})$
- High Power Dissipation
- Wide Area of Safe Operation
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

- Designed for low frequency power amplifier applications.

ABSOLUTE MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

SYMBOL	PARAMETER	VALUE	UNIT
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_c	Collector Current-Continuous	-5	A
P_c	Total Power Dissipation @ $T_a=25^\circ\text{C}$	1.5	W
	Total Power Dissipation @ $T_c=25^\circ\text{C}$	40	
T_J	Junction Temperature	150	$^\circ\text{C}$
T_{stg}	Storage Temperature Range	-40~150	$^\circ\text{C}$



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ELECTRICAL CHARACTERISTICS

 T_c=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{(BR)CEO}	Collector-Emitter Breakdown Voltage	I _C = -10mA; R _{BE} = ∞	-100			V
V _{(BR)EBO}	Emitter-Base Breakdown Voltage	I _E = -5mA; I _C = 0	-5			V
V _{CE(sat)}	Collector-Emitter Saturation Voltage	I _C = -4A; I _B = -0.4A			-1.7	V
V _{BE(on)}	Base-Emitter On Voltage	I _C = -4A; V _{CE} = -5V			-1.5	V
I _{CBO}	Collector Cutoff Current	V _{CB} = -100V; I _E = 0			-30	μ A
I _{CEO}	Collector Cutoff Current	V _{CE} = -100V; R _{BE} = ∞			-0.1	mA
I _{EBO}	Emitter Cutoff Current	V _{EB} = -4V; I _C = 0			-0.1	mA
h _{FE-1}	DC Current Gain	I _C = -1A; V _{CE} = -5V	55		300	
h _{FE-2}	DC Current Gain	I _C = -4A; V _{CE} = -5V	15			

◆ h_{FE-1} Classifications

C	D	E
55-110	90-180	150-300

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